

Programme OTAMP2014

Monday, July 7		
	room 15	
09:00-09:30	Registration	
09:30-09:45	Opening	
09:45-10:25	Anders Karlsson: Spectral invariants of graphs and the Riemann zeta function	
	<i>Coffee and tea</i>	
11:00-11:40	Vladimir Maz'ya: Analytic criteria in the qualitative spectral analysis of the Schroedinger operator	
	room 15	room 14
12:00-12:25	Sergey Belyi: Inverse problems for L-systems	Françoise Truc: Semiclassical analysis for Schrödinger operator in the periodic U(2) gauge case
12:30-12:55	Alexandra Enblom: Estimates of eigenvalues of the Schrödinger operators with complex-valued potentials	Martin Tautenhahn: Quantitative unique continuation and Wegner estimate for the random breather model
	<i>Lunch</i>	
14:15-14:55	Nils Dencker: The spectral instability of non-self-adjoint operators	
15:00-15:40	Rupert Frank: Eigenvalue bounds for non-self-adjoint Schrödinger operators	
	<i>Coffee and tea</i>	
16:15-16:55	Jonathan Breuer: Jacobi matrices and central limit theorems in random matrix theory	
17:15-.....	<i>Reception</i>	

Tuesday, July 8

room 15

09:00-09:40 **Christiane Tretter:** Non-symmetric perturbations of self-adjoint operators with spectral gap

09:45-10:25 **Marco Marletta:** The finite section method for dissipative operators

Coffee and tea

room 15

room 14

11:00-11:25 **Jonathan Harrison:** n-particle quantum statistics on graphs

Volodymyr Derkach: Darboux transformations of non-regular Jacobi matrices

11:30-11:55 **Hiroaki Niikuni:** Spectral band structure of periodic Schrödinger operators on generalized degenerate zigzag nanotubes

Marcin Moszyński: Selections of eigenvectors

12:00-12:25 **Michal Jex:** Properties of the ground state for the quantum graphs with attractive δ -coupling

Frantisek Stampach: The Nevanlinna parametrization and orthogonality relations for q-Lommel polynomials in the indeterminate case

12:30-12:55 **Mikhail Cherdantsev:** Spectral asymptotics of Laplacian in a network of thin domains

Nikos Stylianopoulos: Orthogonal polynomials in the complex plane and applications to moment problems

Lunch

14:15-14:55 **Jussi Behrndt:** Schrödinger operators with delta interactions supported on manifolds

15:00-15:40 **Jacob Stordal Christiansen:** Infinite gap sets and Lieb-Thirring bounds

Coffee and tea

16:15-16:55 **Stanislas Kupin:** Lieb-Thirring type inequalities for complex perturbations of certain operators of mathematical physics

17:15 *Bus leaves for Guided Tour at Institut Mittag-Leffler*

Wednesday, July 9

room 15

09:00-09:40 **Gerald Teschl:** Long-time asymptotics for the Toda shock problem

09:45-10:25 **Edward Brian Davies:** Real and complex spectrum of a family of large $N \times N$ matrices

Coffee and tea

room 15

room 14

11:00-11:25 **Seppo Hassi:** Some new classes of abstract boundary mappings for symmetric operators

Michael Levitin: On non-real eigenvalues of an indefinite Sturm-Liouville operator

11:30-11:55 **Daphne Gilbert:** Eigenfunction expansions associated with the one-dimensional Schrödinger operator

Petr Siegl: Root system of singular perturbations of the harmonic oscillator type operators

12:00-12:25 **Luis O. Silva:** Singular Schrödinger operators as self-adjoint extensions of n -entire operators

Radek Novak: Bound states in \mathcal{PT} -symmetric layers

12:30-12:55 **James Kennedy:** Summation formula inequalities for eigenvalues of Schrödinger operators

Marcel Hansmann: On non-round points of the boundary of the numerical range and an application to non-self-adjoint Schrödinger operators

Lunch

14:00-21:00

*Boat excursion and conference dinner
Busses leave at 14:15*



Thursday, July 10

room 15	
09:00-09:40	Yulia Karpeshina: Quantum transport properties of Schrödinger operator with limit-periodic potential in dimension two
09:45-10:25	David Krejcirik: Pseudospectra in non-Hermitian quantum mechanics
	<i>Coffee and tea</i>
11:00-11:40	Ram Band: Neumann Nodal Domains
	room 15
12:00-12:25	Sergey Poghosyan: Quantum graph vertices with minimal number of passbands
12:30-12:55	Sergey Simonov: On generalizations of Kac theorem on spectral multiplicity for star-graphs
	<i>Lunch</i>
14:15-14:55	Ian Wood: Gap localization by arbitrarily weak waveguides in photonic bandgap structures
15:00-15:40	Jan Dereziński: On the excitation spectrum of the Bose gas
	<i>Coffee and tea</i>
	room 14
16:15-16:40	Jan-Erik Björk: Sonja Kovalevsky and her years as professor in Stockholm
16:40-.....	<i>Visit to the library</i>

room 14

Vladimir Sloushch: Discrete spectrum of periodic Schrödinger operator with non-constant metric in the case of non-negative perturbations

Jockum Aniansson: Some remarks on the semicircle and arcsine

Friday, July 11

room 15

09:00-09:40 **Rudi Weikard:** Stability for the inverse resonance problem for the CMV operator

09:45-10:25 **Håkan Hedenmalm:** On the uniqueness theorem of Holmgren

Coffee and tea

room 15

room 14

11:00-11:25 **Matěj Tušek:** Nodal sets of eigenfunctions of the Laplacian in thin curved layers

Gunter Stolz: A surprising random Jacobi matrix

11:30-11:55 **André Hänel:** Eigenvalue asymptotics for the Laplace-operator on an infinite strip with mixed boundary conditions

Maurice Duits: On mesoscopic equilibrium for Dyson's Brownian motion

12:00-12:25 **Diana Barseghyan:** Semiclassical bounds in magnetic bottles

Ivica Nakić: Equidistribution properties of linear combinations of eigenfunctions of Schrödinger operators

12:30-12:55 **Andrii Khrabustovskyi:** Spectral properties of domains with "room-passage" perturbations

Gustav Karreskog: Bounds of the eigenvalues of quantum graphs with δ -conditions

Lunch

14:15-14:55 **Andrey Shkalikov:** Non-self-adjoint Sturm-Liouville Operators with Parameter

15:00-15:40 **Pavel Exner:** Spectral properties of Schrödinger operators with narrowing channels

Coffee and tea